



AIR - COOLED CONDENSING UNITS
MODEL PC 05Z TO PC 80-01

NOMINAL COOLING CAPACITY RANGE 56.6 TO 772 MBH

Section 5

FEATURES

MODEL PC 05Z TO PC 30-02

CABINET: Cabinets are constructed of heavily zinc coated galvanized steel. Chemically cleaned and phosphatized to bond the specially cleaned and phosphatized to bond the specially formulated corrosion inhibiting, polyester powder coating.

COMPRESSOR: Single or Dual hermetic compressors and semi-hermetic compressors are applied together with internal compressor motor protection.

CONDENSER COIL: Condenser coils are formed of seamless smooth surface or inner grooved copper tubing with mechanically bonded aluminum alloy plate fin slit type.

CONDENSER FAN MOTOR: Permanent split capacitor motor with

permanently lubricated ball bearing and internal thermal protector.

HIGH PRESSURE SWITCH: Protects compressor from excessive condensing pressure.

LOW PRESSURE SWITCH: Protects compressor from excessive evaporating pressure.

STANDARD EQUIPMENT

PC 05Z TO PC 30Z

- HERMETIC COMPRESSOR
- CRANKCASE HEATER
- INTERNAL COMPRESSOR MOTOR PROTECTION
- PSC MOTOR WITH THERMAL PROTECTION
- MAGNETIC CONTACTOR
- HIGH PRESSURE CONTROL SWITCH
- LOW PRESSURE CONTROL SWITCH
- TIME DELAY RELAY
- 24 V. OR 220V. CONTROL CIRCUIT (PC 05Z TO PC 20D)
- 24 V. CONTROL CIRCUIT (PC 25D TO PC 30Z)

PC 15-01 TO PC 30-02

- SEMI-HERMETIC COMPRESSOR
- SOLID STATE COMPRESSOR MOTOR PROTECTION
- CRANKCASE HEATER
- INTERNAL COMPRESSOR MOTOR PROTECTION
- PSC MOTOR WITH THERMAL PROTECTION
- MAGNETIC CONTACTOR
- OIL PRESSURE CONTROL SWITCH
- HIGH PRESSURE CONTROL SWITCH
- LOW PRESSURE CONTROL SWITCH
- TIME DELAY RELAY
- DISCHARGE VALVE
- SUCTION VALVE
- LIQUID VALVE
- 24 V. OR 220 V. CONTROL CIRCUIT (PC 15-01 TO PC 20-01)
- 24 V. CONTROL CIRCUIT (PC 25-01 TO PC 30-02)

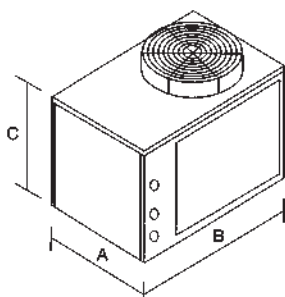
OPTIONAL EQUIPMENT

PC 05Z TO PC 30Z

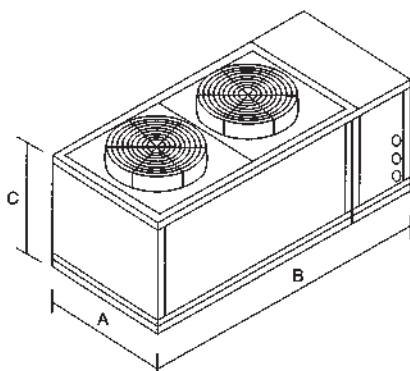
- DISCHARGE VALVE
- SUCTION VALVE
- LIQUID VALVE
- UNDER OVER VOLTAGE PROTECTION
- COPPER FINs

PC 15-01 TO PC 30-02

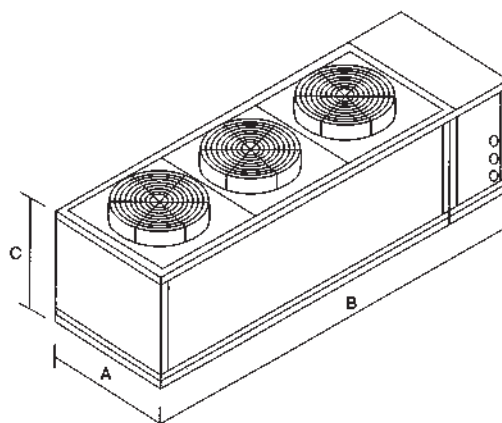
- UNDER OVER VOLTAGE PROTECTION
- COPPER FINs
- UNLOAD



PC05Z-PC12



PC15Z-PC25D
PC15-01 - PC25-01



PC30Z
PC30-02

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SPECIFICATIONS:

UNIT MODEL	PC	05Z	06Z	09	10	12	15Z	20D	25D	30Z	15-01	20-01	25-01	30-02
NOMINAL COOLING CAPACITY	MBH	56.6	60.4	91.8	104.0	141.0	151.8	185.0	237.0	300.9	154.0	185.0	237.0	272.9
AT 95°F AMBT/45°F SST	KW	16.59	17.7	26.91	30.48	41.32	44.49	54.22	69.46	88.19	45.13	54.22	69.46	79.98
POWER SOURCE	V/PH/Hz	380-420/3/50												
CONNECTIONS														
SUCTION-QUANTITY...ODS	INCH	7/8	1-1/8		1-3/8	1-5/8	2...1-1/8	2...1-3/8	2...1-5/8	1-3/8	1-5/8		2...1-5/8	
LIQUID QUANTITY...ODS	OMCH	5/8	5/8		5/8	7/8	2...5/8	2...5/8	2...7/8	5/8	7/8		2...7/8	
UNIT DIMENSION (mm)														
A	DEPTH	740	810		950	1,130			1,130	1,130			1,130	
B	WIDTH	1,060	1,140		1,300	2,440			3,302	2,440			3,302	
C	HEIGHT	791	975		985	888			888	888			888	
UNIT OPERATIONS WEIGHT	KGS	165	168	232	234	243	273	431	460	540	327	354	500	540
COMPRESSIONS														
TYPE		HERMETIC									SEMI-HERMETIC			
POWER SOURCE	V/PH/Hz	380-420/3/50												
MOTOR HP/QUANTITY		5.75/1	6/1	9/1	10/1	12/1	15/1	10/2	12/2	15/2	15/1	20/1	25/1	30/1
RATED LOAD AMPS EACH	Amp	8.6	9.1	15.4	17.3	22.2	23.6	17.3	22.2	23.6	29.8	32.3	45.0	59.0
LOCKED ROTOR AMPS EACH	Amp	74.0	74.0	96.5	104.0	135.0	198.0	104.0	135.0	198.0	144.0	135.0	165.0	200.0
CONDENSER COIL														
TYPE		PLATE FIN (SLIT TYPE) BONDED WITH PLAIN OR INNER GROOVE COPPER TUBES												
NUMBER OF CIRCUIT		1	1	1	1	1	1	2	2	2	1	1	1	2
FACE AREA	FT²	14.1	14.0	14.2	14.2	15.6	23.3	23.3	23.3	35.5	23.3	23.3	23.3	35.5
NO. OF ROWS		1	2	3	3	3	2	3	3	3	2	3	3	3
NO. OF FIN PER INCH		14	14	12	12	12	12	14	14	14	12	14	14	14
CONDENSER FAN														
TYPE		PROPELLER												
QUANTITY		1	1	1	1	1	2	2	2	3	2	2	2	3
DIAMETER	INCH	24	24	24	24	28	26	26	26	26	26	26	26	26
DRIVEN METHOD		DIRECT												
AIR FLOW	CFM	4,500	4,500	5,000	5,000	7,000	9,600	9,600	12,000	16,000	9,600	9,600	12,000	16,000
CONDENSER FAN MOTOR														
TYPE		PERMANENT SPLIT CAPACITOR												
POWER SOURCE	V/PH/Hz	220/1/50												
QUANTITY		1	1	1	1	1	2	2	2	3	2	2	2	3
POWER OUTPUT	H.P.	1/3	1/3	1/3	1/3	3/4	1/2	1/2	3/4	3/4	1/2	1/2	3/4	3/4
RPM		900	900	900	900	938	907	907	938	938	907	907	938	938
FULL LOAD AMPS EACH	Amp	1.97	1.97	1.97	1.97	3.20	3.17	3.17	3.20	3.20	3.17	3.17	3.20	3.20
TYPE PF REFRIGERANT		R-22												
STANDARD COMPONENTS														
REFRIGERANT		HOLDING CHARGE BY R-22												
FILTER DRIER		FIELD SUPPLY												
SIGHT GLASS		FIELD SUPPLY												
ACCESSORIES		MAGNETIC CONTRACTOR, TIME DELAY RELAY AND CRANKCASE HEATER												
SAFETY DEVICES		INTERNAL COMPRESSOR AND FAN MOTOR PROTECTION												
		HIGH AND LOW PRESSURE CONTROL SWITCH												
OPTIONAL COMPONENTS		UNDER OVER VOLTAGE PROTECTION AND COPPER FINS												

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PERFORMANCE DATA

UNIT MODEL	SATURATED SUCTION TEMP. °F	AIR TEMPERATURE ENTERING CONDENSER °F							
		85		95		105		115	
		MBH	KW	MBH	KW	MBH	KW	MBH	KW
PC 05Z	35	50.2	4.4	47.1	4.9	44.0	5.5	40.6	6.0
	40	54.9	4.5	51.5	5.1	48.1	5.6	44.7	6.2
	45	60.4	4.7	56.6	5.2	53.2	5.8	49.5	6.3
	50	65.5	4.9	61.8	5.5	58.0	6.0	54.3	6.5
PC 06Z	35	53.6	4.3	50.5	4.7	47.4	5.3	44.0	5.9
	40	58.7	4.4	55.3	4.9	51.9	5.4	51.5	6.0
	45	64.1	4.5	60.4	5.0	56.6	5.5	52.9	6.1
	50	69.9	4.6	66.2	5.1	62.1	5.7	58.0	6.2
PC 09	35	81.7	8.0	73.9	8.3	66.8	8.5	59.7	8.7
	40	90.3	8.5	82.5	8.9	74.7	9.1	67.2	9.4
	45	100.4	9.1	91.8	9.4	83.6	9.8	75.0	10.1
	50	110.5	9.6	101.2	10.0	92.2	10.4	83.2	10.9
PC 10	35	92.7	9.3	83.4	9.7	76.3	9.9	68.1	10.2
	40	102.8	9.9	93.5	10.3	84.9	10.6	76.3	10.9
	45	113.7	10.6	104.0	11.0	94.6	11.4	85.3	11.8
	50	125.3	11.2	114.8	11.7	104.7	12.2	94.2	12.7
PC 12	35	126.0	12.9	115.8	13.4	106.1	13.9	96.3	14.4
	40	138.6	13.6	128.0	14.3	117.4	14.8	106.9	15.4
	45	152.4	14.4	141.0	15.1	130.0	15.8	118.2	16.4
	50	167.0	15.3	154.4	16.1	142.6	16.8	130.0	17.6
PC 15Z	35	134.4	11.3	126.9	12.6	119.1	14.0	110.9	15.5
	40	147.10	11.6	138.9	12.9	130.3	14.4	121.8	15.8
	45	160.7	11.9	151.8	13.3	143.0	14.6	133.8	16.0
	50	175.4	12.2	165.5	13.6	155.9	15.0	146.0	16.4
PC 20D	35	165.4	17.5	150.2	18.1	135.8	18.5	120.9	19.0
	40	183.3	18.8	167.10	19.3	150.9	19.9	135.1	20.5
	45	202.6	20.1	185.0	20.8	167.8	21.5	150.6	22.2
	50	222.6	21.5	203.6	22.3	185.0	23.2	166.1	24.0
PC 25D	35	213.0	22.9	195.6	23.8	179.3	24.6	162.7	25.4
	40	233.8	24.3	215.8	25.3	197.7	26.3	179.7	27.2
	45	256.8	25.8	237.0	26.9	217.9	28.0	198.8	29.1
	50	280.5	24.7	259.3	28.7	238.8	30.0	217.9	31.2
PC 30Z	35	265.8	21.7	251.8	21.2	236.5	26.9	221.1	29.9
	40	290.7	22.2	275.0	24.7	259.0	27.5	242.3	30.5
	45	317.7	22.7	300.9	25.7	283.5	28.1	265.3	31.0
	50	346.3	23.2	327.9	25.8	309.1	28.7	290.7	31.5
PC 15-01	35	139.0	11.3	131.0	12.1	120.0	13.2	109.0	14.2
	40	153.0	11.8	143.0	12.6	128.0	13.6	119.0	15.5
	45	165.0	12.3	154.0	13.1	132.0	14.2	127.0	16.7
	50	180.0	12.9	167.0	13.7	135.0	14.8	129.0	17.4
PC 20-01	35	161.9	12.4	151.0	13.3	136.8	14.2	127.2	14.9
	40	183.1	12.8	168.0	13.7	152.3	15.1	138.7	15.6
	45	204.3	13.2	185.0	14.2	167.6	15.5	154.2	16.2
	50	215.3	13.4	202.0	14.6	186.9	15.9	163.6	16.9
PC 25-01	35	201.5	16.6	186.6	17.1	168.5	18.4	152.0	19.6
	40	227.2	17.1	212.0	17.7	188.7	19.4	170.4	20.5
	45	252.8	17.5	237.0	18.2	212.4	20.0	191.5	21.4
	50	285.5	18.0	263.3	18.7	238.0	20.7	216.2	22.2
PC 30-02	35	249.3	22.6	229.6	23.9	209.5	25.4	187.8	26.9
	40	272.9	23.7	251.2	25.3	228.8	26.8	205.5	28.3
	45	297.3	25.0	272.9	26.7	248.8	28.2	224.0	29.7
	50	322.1	26.3	294.1	28.2	268.5	29.7	242.5	31.2

SPECIFICATION ARE SUBJECT TO CHANGE WITHOUT NOTICE

Section 5

FEATURES

MODEL PC 30-01 TO PC 80-01

CABINETS: Cabinets are constructed of heavily zinc coated galvanized steel, chemically cleaned and phosphatized to bond the specially formulated corrosion inhibiting, polyester powder coating.

COMPRESSOR: single or Dual semi hermetic compressors are applied together with solid state compressor motor protection.

CONDENSER COIL: condenser coils are formed of seamless smooth surface or inner grooved copper tubing with mechanically bonded aluminium alloy plate fin slit type.

CONDENSER FAN MOTOR: permanent split Capacitor motor with permanently lubricated ball bearing and internal thermal protector.

ELECTRONIC OIL PRESSURE SWITCH: Protects compressor from loss of compressor oil.

HIGH PRESSURE SWITCH: Protects compressor from excessive condensing pressure.

LOW PRESSURE SWITCH: Protects compressor from excessive evaporating pressure.

CRANKCASE HEATER: Protects compressor failure caused by freezing of compressor oil.

RECYCLING TIME DELAY RELAY: Protects compressor from hard starting condition.

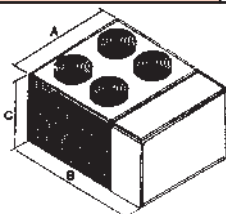
STANDARD FEATURES	OPTIONAL FEATURES
• Semi-hermetic compressor • Solid state compressor motor protection. • PSC motor with thermal protection. • Electronic oil pressure protection • High pressure protection • Low pressure protection • Crankcase heater • Magnetic contactor • Recycling time delay relay • 24 V. control circuit. • Capacity steps control. • Sequential start (Dual compressor model) • Service valve	• Part winding start (PC50-01 to PC80-01) • 220 V. control circuit • Pump down circuit • Two speed fan motor • Copper fins • Multiple hermetic compressor unit

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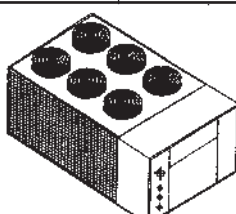
CONDENSING UNIT

SPECIFICATIONS:

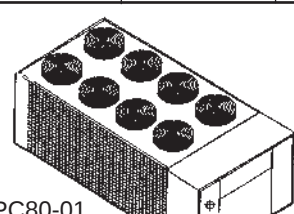
UNIT MODEL	PC	30-01	35-01	40-01	50-01	60-01	70-01	80-01
NOMINAL COOLING CAPACITY	MBH	277.0	350.0	386.0	466.0	554.0	700.0	772.0
AT 95°F AMBT/45°F ASST	KW	81.2	102.6	113.1	136.6	162.4	205.2	226.3
POWER SOURCE	V/PH/Hz	380-420/3/50						
CAPACITY STEPS	%	100/50/0	100/66/0		100/50/0			
CONNECTIONS								
SUCTION-QUANTITY....ODS	inch	1-5/8	2-1/8		2...1-5/8	2...1-5/8	2...2-1/8	
LIQUID -QUANTITY....ODS	inch	7/8	7/8		2...3/4	2...7/8	2...7/8	
UNIT DIMENSION(mm)	A	1885	2040		2040		2040	
	B	2395	2595		3180		3945	
	C	1325	1540		1490		1490	
UNIT OPERATING WEIGHT	Kgs/Lbs	795/1750	814/1790	825/1815	866/1905	887/1950	1314/2890	1409/3100
COMPRESSORS		SEMI HERMETIC						
TYPE								
POWER SOURCE	V/PH/Hz	380-420/3/50						
MOTOR HP/QUANTITY		30/1	35/1	40/1	25/2	30/2	35/2	40/2
RATED LOAD AMPS EACH	A	59.0	62.7	64.3	45.0	59.0	62.7	64.3
LOCKED ROTOR AMPS EACH	A	200.0	225.0	239.0	165.0	200.0	225.0	239.0
CONDENSER COIL		PLATE FIN (SLIT TYPE) BONDED WITH PLAIN OR INNER GROOVE COPPER TUBES						
TYPE								
NUMBER OF CIRCUIT		1	1	1	2	2	2	2
FACE AREA	FT ² /M ²	39.2/3.64	50/4.65	50/4.65	66/6.13	66/6.13	100/9.3	100/9.3
NO. OF ROWS		2	3	4	3	4	3	4
NO. OF FIN PER INCH/METRE		14/551	14/551	12/472	12/472	14/551	12/472	12/472
CONDENSER FAN		PROPELLER						
TYPE								
QUANTITY		4	4	4	6	6	8	8
DIAMETER	inch	26	28	28	26	26	28	28
DRIVEN METHOD		DIRECT						
AIR FLOW	CFM	21,500	25,000	25,000	33,000	33,000	50,000	50,000
CONDENSER FAN MOTOR		PERMANENT SPLIT CAPACITOR						
TYPE								
POWER SOURCE	V/PH/Hz	220/1/50						
QUANTITY		4	4	4	6	6	8	8
POWER OUTPUT	HP/KW	0.75/0.56	0.75/0.56	0.75/0.56	0.75/0.56	0.75/0.56	0.75/0.56	0.75/0.56
RPM		900	900	900	900	900	900	900
FULL LOAD AMP EACH	A	4.5	4.5	4.5	4.5	4.5	4.5	4.5
TYPE OF REFRIGERANT		R-22						
STANDARD COMPONENTS		HOLDING CHARGE BY R-22						
REFRIGERANT								
FILTER DRIER		FIELD SUPPLY						
SIGHT GLASS		FIELD SUPPLY						
SERVICE VALVES		COMPRESSOR SERVICE VALVE AND LIQUID SHUT OFF VALVE						
COMPRESSOR PROTECTION		SOLID STATE MODULE						
FAN MOTOR PROTECTION		INTERNAL THERMAL						
HIGH PRESSURE PROTECTION		YES	YES	YES	YES	YES	YES	YES
LOW PRESSURE PROTECTION		YES	YES	YES	YES	YES	YES	YES
OIL PRESSURE PROTECTION		YES	YES	YES	YES	YES	YES	YES
RECYCLING TIME DELAY RELAY		YES	YES	YES	YES	YES	YES	YES
CRANKCASE HEATER		YES	YES	YES	YES	YES	YES	YES
MAGNETIC CONTACTOR		YES	YES	YES	YES	YES	YES	YES
24V CONTROL CIRCUIT		YES	YES	YES	YES	YES	YES	YES
CAPACITY STEPS CONTROL		YES	YES	YES	YES	YES	YES	YES
UNDER OVER VOLTAGE PROTECTION		OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION
SHIPPING DIMENSION (mm)	A	1985	2140		2140		2140	
	B	2495	2695		3280		4045	
	C	1475	1690		1640		1690	
SHIPPING HEIGHT	Kgs/Lbs	835/1837	854/1879	865/1903	916/2015	937/2061	1374/3023	1469/3232



PC30-01 TO PC40-01



PC50-01 TO PC60-01



PC70-01 to PC80-01

Section 5

PERFORMANCE DATA

UNIT MODEL	SATURATED SUCTION TEMP. °F	AIR TEMPERATURE ENTERING CONDENSER °F							
		85		95		105		115	
		MBH	KW	MBH	KW	MBH	KW	MBH	KW
PC30-01	35	246.0	19.1	235.0	20.5	202.8	21.8	180.6	23.3
	40	273.7	19.7	256.0	21.3	224.9	22.8	199.4	24.4
	45	301.4	20.4	277.0	22.0	249.3	23.8	221.6	25.5
	50	330.2	21.0	298.0	22.5	273.3	24.7	234.8	26.5
PC35-01	35	303.1	24.3	284.0	26.3	259.5	27.7	236.6	29.6
	40	341.3	25.0	317.0	27.0	291.1	28.6	263.9	30.6
	45	377.3	25.6	350.0	27.5	322.7	29.6	295.5	31.5
	50	417.6	26.1	383.0	28.3	358.7	30.6	329.3	32.6
PC40-01	35	334.2	28.4	312.0	31.2	282.3	32.2	255.9	33.3
	40	372.8	29.3	349.0	31.7	317.6	33.0	290.1	34.7
	45	416.9	30.1	386.0	32.9	354.0	34.1	324.2	36.1
	50	464.3	30.9	423.0	33.3	394.8	35.0	358.5	37.3
PC50-01	35	403.0	33.2	370.0	34.2	337.0	36.8	305.8	39.2
	40	454.4	34.2	416.0	35.4	377.4	38.8	340.8	41.0
	45	505.6	35.0	466.0	36.6	424.8	40.0	383.0	42.8
	50	571.6	36.0	516.0	37.4	476.4	41.1	432.4	44.4
PC60-01	35	492.0	38.2	470.0	41.0	405.6	43.6	361.2	46.6
	40	547.4	39.4	512.0	42.6	449.8	45.6	398.8	48.9
	45	602.8	40.8	554.0	44.0	498.6	47.6	443.2	51.0
	50	660.4	42.0	596.0	45.0	547.4	49.4	487.6	53.0
PC70-01	35	606.2	48.6	568.0	52.6	519.0	55.4	473.2	59.2
	40	682.6	50.0	634.0	54.6	582.2	57.2	527.8	61.2
	45	754.6	51.2	700.0	55.0	645.4	59.2	591.0	63.0
	50	835.2	52.2	766.0	56.6	717.4	61.2	658.6	65.2
PC80-01	35	668.4	56.8	624.0	62.4	564.6	64.4	511.8	66.6
	40	745.6	58.6	698.0	63.4	635.2	66.0	580.2	69.4
	45	833.8	60.2	772.0	65.8	708.0	68.2	648.4	72.2
	50	928.6	61.7	846.0	66.6	789.6	70.0	720.0	74.6